

**REMARKS**

Upon entry of the indicated amendments, claims 1-19 and 22-29 will be pending. Claims 1-16 and 23-29 have been withdrawn due to an earlier restriction requirement. Claims 17 and 19 have been amended to more clearly define the invention. Claim 21 has been cancelled as its limitations have been incorporated into independent claim 17. No new matter has been introduced upon entry of these amendments. The amendments are being made without prejudice. Applicants reserve the right to file the original claims in one or more divisional, continuation, or continuation-in-part patent applications.

Applicant acknowledges and appreciates Examiner Haq taking the time from his schedule for the telephonic interview with Applicant's representatives Jeffrey Rosedale and Joshua Sanders on December 9, 2009.

***Rejections under 35 U.S.C. § 112***

***Section 112, Second Paragraph***

Claims 17-19 and 21-22 stand rejected under 35 U.S.C. § 112, second paragraph because the claim language "hydrogen-alkali-group VIA element" is allegedly indefinite. Although Applicant disagrees with this rejection, as discussed in the Examiner Interview, claim 17 has been amended solely in an effort to advance prosecution in a manner that Applicant believes renders the rejection moot. Claim 21 has been cancelled too.

Additionally, claims 17-19 and 21-22 stand rejected under 35 U.S.C. § 112, second paragraph because use the term or in the following claim language "wherein the biofunctional group comprises a saccharide or the mercaptoalkanoic acid is linked to a surface of a nanocrystalline core of the quantum dot without a shell layer" is allegedly vague and indefinite. As discussed in the Examiner Interview, Applicant has amended claim 17 in a manner that Applicant believes renders the rejection moot. Claim 21 has been cancelled too.

Claims 17-19 and 21-22 also stand rejected under 35 U.S.C. § 112, second paragraph because claim 17 is alleged to not provide any method step(s) related to how mercaptoalkanoic acid is linked to a surface of a nanocrystalline core of the quantum dot without a shell layer. As discussed in the Examiner Interview, Applicant has amended claim 17 in a manner that Applicants believe renders the rejection moot.

Claim 19 stands rejected under 35 U.S.C. § 112, second paragraph, because the term “catalyst” has allegedly not been clearly defined or described in the specification. Although Applicant does not necessarily agree with this rejection, in order to advance prosecution, claim 19 has been amended in a manner Applicant believes renders this rejection moot.

Accordingly, Applicant respectfully requests withdrawal of the rejections under 35 U.S.C. § 112, second paragraph.

*Section 112, First Paragraph*

Claims 17-19 and 21-22 stand rejected under 35 U.S.C. § 112, first paragraph because the phrase “suitable solvent” allegedly lacks written description. Although Applicant does not necessarily agree, claim 17 has been amended solely in an effort to advance prosecution in a manner that Applicant believes renders the rejection moot. This was discussed with the Examiner during the aforementioned interview.

*Rejections under 35 U.S.C. § 101*

Claims 17-19 and 21-22 stand rejected under 35 U.S.C. § 101 because the recitation of “wherein . . . the mercaptoalkanoic acid is linked to a surface of a nanocrystal core of the quantum dot without a shell layer” allegedly results in an improper definition of a process. Although Applicant disagrees with this rejection, as discussed in the Examiner Interview, claim 17 has been amended solely in an effort to advance prosecution in a manner that Applicant believes renders the rejection moot.

*Conclusion*

Applicants submit that the foregoing represents a bona fide attempt to advance the present case to allowance, and that the application is now in condition for allowance. Accordingly, Applicants respectfully request an indication of allowability and an early Notice of Allowance.

**DOCKET NO.:** NIHC-6036  
**Application No.:** 10/578,405  
**Office Action Dated:** August 14, 2009

**PATENT**

Date: January 14, 2010

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